

# WEST Search History

DATE: Tuesday, January 21, 2003

Set Name Query  
side by side

Hit Count Set Name  
result set

*DB=USPT,DWPI; PLUR=YES; OP=ADJ*

L1 matzuk-M\$.in. or Wang-p\$.in.

1289 L1

L2 L1 and nucleoplasmin

0 L2

L3 L1 and O1-236 gene

0 L3

L4 l1 and (oocyte or ovaries)

8 L4

L5 l1 and ovary specific gene

0 L5

L6 nucleoplasmin

71 L6

L7 L6 and ovary specific gene

0 L7

L8 L6 and oocyte

12 L8

*DB=USPT,PGPB,EPAB,DWPI; PLUR=YES; OP=ADJ*

L9 O1-236 gene

1 L9

L10 nucleoplasmin 2

2 L10

*DB=USPT,DWPI; PLUR=YES; OP=ADJ*

L11 5563059.pn. or 5547854.pn. or 5661126.pn. or 5801016.pn.

8 L11

L12 ovary-specific genes and proteins O1-180

0 L12

*DB=DWPI; PLUR=YES; OP=ADJ*

L13 ovary specific genes

1 L13

L14 l13 and o1-180

0 L14

END OF SEARCH HISTORY

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(FILE 'HOME' ENTERED AT 15:55:12 ON 21 JAN 2003)

FILE 'MEDLINE, BIOTECHDS, EMBASE, BIOSIS, SCISEARCH, CANCERLIT, CAPLUS'  
ENTERED AT 15:55:23 ON 21 JAN 2003

L1	786 S MATZUK-M?/AU
L2	786 S MATZUK M?/AU
L3	17897 S WANG P?/AU
L4	1 S (L1 OR L2) AND (OVAR? SPECIFIC GENE#)
L5	36 S OVARY-SPECIFIC GENE#
L6	0 S NUCLEOPLASMIN 2
L7	45 S NMP2
L8	13 S NPM2
L9	1 S L5 AND L8
L10	20 DUP REM L5 (16 DUPLICATES REMOVED)

=>

132:330621

TI **Ovary-specific genes** and proteins O1-180,  
O1-184 and O1-236/Npm2 of mouse and therapeutic uses

IN **Matzuk, Martin M.**; Wang, Pei

PA Baylor College of Medicine, USA

SO PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07H021-02

CC 3-3 (Biochemical Genetics)

Section cross-reference(s): 1, 6, 13

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000024755	A1	20000504	WO 1999-US25209	19991028
	W: AU, CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1124840	A1	20010822	EP 1999-956718	19991028
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 2002042926	A1	20020411	US 2001-844864	20010427
PRAI	US 1998-106020P	P	19981028		
	WO 1999-US25209	W	19991028		
AB	Ovary-specific proteins O1-180, O1-184 and O1-236 from mouse, polynucleotides encoding them, antibodies which are immunoreactive with them and vectors and host cells contg. O1-180, O1-184 or O1-236 are provided. O1-236 protein is homologous to Xenopus nucleoplasmin (Npm2). Both O1-236/Npm2 and Xnpm2 genes have similar expression patterns in oocytes. Structure and localization of the mouse gene Npm2 on chromosome 14 between D14Mit203 and D14Mit32 was detd. Methods for detecting cell proliferative or degenerative disorders of ovarian origin which are assocd. with O1-180, O1-184 or O1-236 are provided. Further provided are methods for the evaluation of potential contraceptives using the proteins of the invention, as well as methods for the screening for genetic mutations in signaling pathways that are assocd. with some forms of human infertility or gynecol. cancers, also using the proteins/mRNAs/genes of the invention.				
ST	mouse gene Npm2 nucleoplasmin sequence mapping; cDNA sequence ovary specific protein mouse				
IT	Genetic markers (D14Mit203 and D14Mit32, Npm2 gene mapped between; <b>ovary-specific genes</b> and proteins O1-180, O1-184 and O1-236/Npm2 of mouse and therapeutic uses)				
IT	Gene, animal RL: BOC (Biological occurrence); BSU (Biological study, unclassified);				
PRP	(Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses) (Npm2; <b>ovary-specific genes</b> and proteins O1-180, O1-184 and O1-236/Npm2 of mouse and therapeutic uses)				
IT	Eukaryote (Eukaryotae) Prokaryote (cell, as expression host; <b>ovary-specific genes</b> and proteins O1-180, O1-184 and O1-236/Npm2 of mouse and therapeutic uses)				
IT	Mutation (detn. of mutations in diseases; <b>ovary-specific genes</b> and proteins O1-180, O1-184 and O1-236/Npm2 of mouse and				

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L5	l1 and ovary specific gene	0	L5
L6	nucleoplasmin	71	L6
L7	L6 and ovary specific gene	0	L7
L8	L6 and oocyte	12	L8
<i>DB=USPT,PGPB,EPAB,DWPI; PLUR=YES; OP=ADJ</i>			
L9	O1-236 gene	1	L9
L10	nucleoplasmin 2	2	L10

END OF SEARCH HISTORY

**WEST**

Generate Collection

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L8: Entry 6 of 12

File: USPT

Feb 13, 2001

DOCUMENT-IDENTIFIER: US 6187749 B1

TITLE: Methods for variation of chromatin condensation

Brief Summary Text (8):

A further technique which is applicable in certain circumstances is known as premature chromosome condensation (PCC). It was first described by Hittelman and Rao, (1978) Cancer Res. 38:416-423. This technique results in the condensation of chromatin/chromosomes in interphase cells. It may be achieved in vitro using CHO or HeLa cells, or inactivated Sendai virus. Alternatively non-physiological agents such as polyethylene glycol (PEG) may be involved as well as synthetic acidic proteins such as poly L-glutamic acid and extracts from non-mammalian cells such as Xenopus egg extracts from germ-line cells such as hamster oocytes. The technique has been utilised many times in the art, for example in studies of acute lymphoblastic leukaemia (Macleod et al., Genes, Chromosomes & Cancer, (1989) 1, 135-138). It is however a very difficult technique to apply in the laboratory and only a limited number of research groups utilise it.

Brief Summary Text (10):

A number of in vitro systems, which mimic the events at fertilisation, have been developed in order to enable the changes in chromatin structure and the mechanisms of chromatin remodelling to be studied. These are reviewed by Leno et al., in John Innes Review, The Chromosome, Ed. J S Heslop-Harrison, (1992) R. B Flavell Bros. Scientific Publishers. p135-147. The principal component found to be effective in the decondensation and remodelling of sperm is nucleoplasmin, a protein isolated from the eggs of Xenopus laevis.

**WEST**

Generate Collection

Print

L8: Entry 4 of 12

File: USPT

May 15, 2001

DOCUMENT-IDENTIFIER: US 6232107 B1

TITLE: Luciferases, fluorescent proteins, nucleic acids encoding the luciferases and fluorescent proteins and the use thereof in diagnostics, high throughput screening and novelty items

Detailed Description Text (355):

Exemplary cells include bacteria (e.g., *E. coli*), plant cells, cells of mammalian origin (e.g., COS cells, mouse L cells, Chinese hamster ovary (CHO) cells, human embryonic kidney (HEK) cells, African green monkey cells and other such cells known to those of skill in the art), amphibian cells (e.g., *Xenopus laevis oocytes*), yeast cells (e.g., *Saccharomyces cerevisiae*, *Pichia pastoris*), and the like. Exemplary cells for expressing injected RNA transcripts include *Xenopus laevis oocytes*. Eukaryotic cells that are preferred for transfection of DNA are known to those of skill in the art or may be empirically identified, and include HEK293 (which are available from ATCC under accession #CRL 1573); Ltk.sup.- cells (which are available from ATCC under accession #CCL1.3); COS-7 cells (which are available from ATCC under accession #CRL 1651); and DG44 cells (dhfr.sup.- CHO cells; see, e.g., Urlaub et al. (1986) Cell. Molec. Genet. 12: 555). Presently preferred cells include strains of bacteria and yeast.

Detailed Description Text (363):

Exemplary cells include bacteria (e.g., *E. coli*), plant cells, cells of mammalian origin (e.g., COS cells, mouse L cells, Chinese hamster ovary (CHO) cells, human embryonic kidney (HEK) cells, African green monkey cells and other such cells known to those of skill in the art), amphibian cells (e.g., *Xenopus laevis oocytes*), yeast cells (e.g., *Saccharomyces cerevisiae*, *Pichia pastoris*), and the like. Exemplary cells for expressing injected RNA transcripts include *Xenopus laevis oocytes*. Eukaryotic cells that are preferred for transfection of DNA are known to those of skill in the art or may be empirically identified, and include HEK293 (which are available from ATCC under accession #CRL 1573); Ltk.sup.- cells (which are available from ATCC under accession #CCL1.3); COS-7 cells (which are available from ATCC under accession #CRL 1651); and DG44 cells (dhfr.sup.- CHO cells; see, e.g., Urlaub et al. (1986) Cell. Molec. Genet. 12: 555). Presently preferred cells include strains of bacteria and yeast.

Other Reference Publication (68):

Badminton et al., nucleoplasmin-targeted aequorin provides evidence for a nuclear calcium barrier, Expt. Cell Research 216(1): 236-243 (1995).

**WEST**☐  

L8: Entry 3 of 12

File: USPT

Jun 12, 2001

DOCUMENT-IDENTIFIER: US 6245567 B1

TITLE: Activating egg extracts and method of preparation

Brief Summary Text (4):

Jackson, Seminars in Perinatology 15:49 (1991), describes various procedures for prenatal diagnosis, including procedures to diagnose diseases. These procedures involve analysis of the DNA present in early embryonic stages. Specifically, Jackson mentions the use of a polymerase chain reaction to amplify genes, and the possibility of testing oocytes by polar body assay. According to Jackson:

Detailed Description Text (33):

Freshly ovulated *Xenopus* eggs can be hardened by stabilizing the eggs vitelline envelope as described by Wangh, J. Cell Science 93:1 (1989). Obtaining freshly ovulated eggs from female *Xenopus* is facilitated by injecting hormones which cause *Xenopus* to ovulate. Injecting 600 units of human chorionic gonadotropin (HCG) into a *Xenopus* female generally brings about ovulation within 12-15 hours. Injection of pregnant mare serum gonadotropin about 24 hours before HCG treatment significantly increases the yield of mature eggs. Furthermore, repeated ovulation of frogs once every 4-8 months improves the yield of eggs by increasing the synchrony of oocyte development in the ovary.

Other Reference Publication (14):

Masui, "Hormonal And Cytoplasmic Control of The Maturation of Frog Oocytes," Ontogenez vol. 3 No. 6 pp. 574-587 (1972).

Other Reference Publication (15):

Masui et al., "Roles of Ca Ions And Ooplasmic Factors In The Resumption of Metaphase-Arrested Meiosis In *Rana Pipiens* Oocytes," Symp. Soc. Exp. Biol. 38:45-66 (1984).

Other Reference Publication (36):

Cox et al., "Extracts From Eggs And Oocytes of *Xenopus Laevis* Differ In Their Capacities For Nuclear Assembly And DNA Replication," J. Cell Science 97:177-184 (1990).

Other Reference Publication (55):

Philpott et al., "Sperm Decondensation In *Xenopus* Egg Cytoplasm Is Mediated By Nucleoplasmin," Cell 65:569-578 (1991).

Other Reference Publication (56):

Philpott et al., "Nucleoplasmin Remodels Sperm Chromatin In *Xenopus* Egg Extracts," Cell 69:759-767 (1992).

Other Reference Publication (58):

Sleeman et al., "Patterns of DNA Replication In *Drosophila* Polytene Nuclei Replicating In *Xenopus* Egg And Oocyte Extracts," J. Cell Science 101:509-515 (1992).